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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,252	07/25/2000	Jean M. McManus	Bell-33	7622

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EXAMINER

STRANGE, AARON N

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/625,252

Applicant(s)

MCMANUS, JEAN M.

Examiner

Aaron Strange

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. The Examiner would like to note that the present application has been reassigned to a new Examiner.

Response to Arguments

2. Applicant's arguments filed 4/7/2005 have been fully considered but they are not persuasive.

3. With regard to claims 1, 12, and 20, and Applicant's assertion that the amendments to claims 1, 12, and 20 distinguish over the Locklear patent since the claimed method is performed "at the premises where the LAN and terminal are located" (Page 10, Lines 4-6), the Examiner respectfully disagrees. The Examiner has carefully reviewed the Locklear patent and the currently presented claims. While the amendments to claims 1, 12, and 20 do clarify the claimed subject matter and the locations of the claimed elements, the Locklear patent still meets the limitations of the currently presented claims, as discussed below.

4. Figure 1 of Locklear clearly shows that the device 12 is located "at the premises" along with the LAN. The device also performs the claimed selection of one of the at least two communications links and assigning it to a session.

Locklear discloses that the device 12 "identifies one or more twisted pair lines 22 that are available to communicate data with server 16" and "For *each twisted pair line*

22 identified *for the session*, device 12 communicates a *request* for service to server 16” (Col 5, Lines 4-7) (emphasis added). It is clear from this recitation that a request for service will be sent to the server for each line identified for the session.

Locklear further discloses that the “Server 16 responds to *the request* for service by selecting an available modem in its modem pool, retrieving stored line characteristics, training *the associated twisted pair line 22* for communication, and establishing XDSL communication protocols.” (emphasis added) (Col 5, Lines 25-29). It is clear from this recitation that the server will respond to each request for service by selecting an available modem and training a single associated twisted pair line for use with that modem.

Locklear further discloses “Once the communication path is set up, the participating elements of communication system 10 operate to exchanger information associated with a session” (Col 5, Lines 38-40), namely data.

Finally, Locklear discloses “Device 12 converts the data into a protocol consistent with communication over twisted pair lines 22, and sends the data to server 16 over *one or more active lines 22*” (emphasis added) (Col 5, Lines 42-45). It should be noted that the data could not be sent over “one or more” active lines at this point in the session unless those lines had been activated when the session was initiated. Therefore, the server has to respond to each request for service, over each line “identified for the session” by the device 12, meaning that the lines used for a session are, in fact, selected by the device 12, and not server 16. Server 16 merely responds to the request by selecting a modem and associating it with the line selected by the device 16 using

switch 100. Device 12 will only send a request for service over the lines "identified for the session", since the server will respond to each and every request for service.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 38 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. With regard to claim 38, the limitation "wherein the means for selecting selects at least one of the two communications links", in lines 1-2, is unclear, since claim 20, from which claim 38 depends, states that only one link is selected by the means for selecting. The Examiner recommends that the claim be amended to recite "wherein the means for selecting selects one of the at least two communications links", and it has been interpreted as such for the purpose of applying prior art.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1, 12, 20, and 36-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al. (US 6,483,870).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1, 12, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Locklear, Jr. et al. (Us 6,483,870).

11. With regard to claims 1, 12, and 20, Locklear discloses a method for use in a system at a premises, the system having at least one terminal (20), a local area network including the at least one terminal (18), and coupled with units (12) that terminate at

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least two communication links (22) between the premises and a communications provider facility (16) located off the premises, the method comprising:

- accepting data on the local area network (device 12 receives a session initiation signal from terminal 20) (18, col. 5 line 1-2, col. 6 lines 44-52);
- Determining whether the data accepted concerns establishing a connection or is part of an established connection (col. 5 lines 1-5 and 53-67),
- If it is determined that the data accepted concerns establishing a connection (col. 5 lines 1-5), then:
 - Selecting, at the premises, one of the at least two communication links based on policy (available line is identified and selected by the controller in the device 12) (Col 5, Lines 4-5; Col. 6, Lines 53-59),
 - Assigning the selected one of the at least two communication links to a session to be associated with the data accepted (the selected line is assigned to the session) (Col 5, Lines 4-7); and
 - Forwarding the data accepted (session request) to only the selected one of the at least two communication links and not to any non-selected ones of the at least two communications links (request for service is sent over the line identified for the session) (Col 5, Lines 5-7); and
- If it is determined that the data accepted is part of an established connection, then forwarding the data accepted to the assigned communication link (Col 5, Lines 40-45).

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12. With regard to claims 36-38, Locklear further discloses that the act of selecting is performed before the data is communicated over any of the at least two communication links (Col 5, Lines 1-7).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 2-11, 13-19, and 21-25 is rejected under 35 U.S.C. 103(a) as being unpatentable Locklear, Jr. et al. (Us 6,483,870) in view of Mamakos (RFC 2526: "A Method for Transmitting PPP Over Ethernet").

15. In referring to claim 2, although Locklear shows substantial features of the claimed invention, it does not explicitly point out details of PPPoE. Nonetheless PPPoE is well known method of transmitting multi-protocol packets over a point-to-point link.

In an analogous art, Mamakos shows a method for sending PPPoE frames (section 4).

Given the standard protocol of PPPoE a person of ordinary skill in the art would have realized the advantages of modifying the system shown by Locklear to employ

PPPoE in order to connect multiple hosts to a remote site in a cost effective manner (see Mamakos section 1 Introduction).

16. In referring to claim 3, Mamakos shows the act of determining whether connection is new or an established connection is based on Ether-type field of the PPPoE frame (section 3, section 4 Payloads, ETHER_TYPE, see also Locklear col. 6 lines 24-35).

17. In referring to claim 4, Mamakos shows PPPoE discovery initiation packet is for establishing a connection (sec. 5 Discovery Stage, sec. 5.1 PADI).

18. In referring to claim 5, Mamakos shows a packet selected from a group of packets consisting of a PADO packet (section 5.2), and PADR packet (section 5.3), PADS packet and a session stage packet (section 5.4).

19. In referring to claim 6 and 17, Mamakos shows in establishing a connection storing the selected on of the at least two communications links and an associated session ID (section 4, payloads- session ID).

20. In referring to claim 7, Mamakos shows in establishing a connection, storing a terminal ID.

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21. In referring to claim 8, 19, and 24, Locklear shows policy wherein communication link is selected from a group of function consisting of traffic, past selection states, terminal source of accepted data, user, time present states (fig. 4 and col. 8 lines 25-38 and col. 7 lines 17-29).

22. In referring to claim 9, Mamakos shows determining that data is part of an established connection and that the data is a request to terminate the connection, then freeing the communication link (sec. 5.5 PADT).

23. In referring to claim 10, Mamakos shows freeing the selected one of the at least two communications links and permitting the stored selected one of the at least two communications links and the associated session ID to be over written (Mamakos section 5.5, see also Locklear col. 5 line 57-61).

24. In referring to claim 11, Locklear shows connection is a connection (22) to a session server (16) (fig. 1).

25. In referring to claim 13, Mamakos shows receiving session offer (PADO packet), forwarding the session offer towards the terminal which requested the session (section 5.2).

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26. In referring to claim 14, Mamakos shows receiving a session acceptance (PADR) from the at least one terminal, forwarding the session acceptance to the assigned one of the at least two communication links (section 5.3).

27. In referring to claim 15, Mamakos shows receiving data associated with session identification and forwarding the data to the selected communication link (sec. 6).

28. In referring to claim 18, Locklear shows forwarding session request to a communication link (22), and forwarding the session request and the assigned communications link to a line forwarding process (communication server 16) (col. 7 lines 28-34), and forwarding the session request from the line forwarding process to the assigned communication link (col. 7 line 28-30).

29. In referring to claim 21, Mamakos shows a link termination unit, each link termination units terminating an associated one of the communication links (sec. 5.5 PADT).

30. In referring to claim 22 and 29, Locklear shows each link termination units as a DSL terminating unit-remote (col. 1 lines 52-58).

31. In referring to claim 23, Locklear shows storage device for storing policies used for selecting one of the communication links to select (fig. 2, item 74).

32. In referring to claim 25, Locklear shows a means for managing the policies stored in the storage device (fig. 2 76-86).

33. In referring to claim 26-28 Locklear shows data looping in the system, before session establishment is prevented (via session tables which select the most appropriate modem connection to handle session requests, col. 9 lines 55-67 and col. 7 lines 17-29).

34. In referring to claim 30-35, Locklear shows that data looping is in the system caused by session establishment, is prevented because the data accepted, including PPPoE active Discover Offer packets are forwarded to only the selected one of the at least two communications links and not to any non-selected ones of the at least two communication links (col. 5 lines 25-37, col. 7 lines 17-29, and col. 9 lines 55-67).

Conclusion


35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS 7/20/2005



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